

## RECOMMENDED MITIGATION MEASURES FOR THE DESERT TORTOISE

## APPENDIX B

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Mitigation measures would be applied to project construction and maintenance. The following description provides recommended mitigation measures for reducing impacts to plant and wildlife in the project area. Prior to issuance of any Federal permit, lease, or authorization for any surface-disturbing activity, Western would determine if the Proposed Action would affect the desert tortoise.

- 1. A tortoise-education program shall be presented to all personnel working on the project or activities associated with the project or visiting the project site. This program shall be presented by a qualified tortoise biologist. The program shall include information on the legal protection for desert tortoises, penalties for violations of Federal and state laws, the life history of the desert tortoise, general tortoise-activity patterns, reporting requirements, measures to protect tortoises and personal measures that employees can employ to promote the conservation of desert tortoises. The definition of "take" will also be explained. Specific and detailed instructions will be provided on the proper techniques to move tortoises that appear onsite, in accordance with USFWS-approved protocol. Currently, the USFWS-approved protocol is that described by the Desert Tortoise Council (1994, revised 1999).
- 2. A qualified desert tortoise biologist shall possess, at a minimum, a bachelor's degree in biology, ecology, wildlife biology, herpetology, or closely related fields as determined by Western. The biologist must have demonstrated prior filed experience using accepted resource agency techniques to survey for desert tortoises and tortoise sign, which would include a minimum of 60 days of field experience. All tortoise biologists shall comply with the USFWS-approved handling protocol prior to conducting tasks in association with the biological opinion. In addition, the biologist shall have the ability to recognize tortoise sign and accurately record survey results.
- 3. The qualified biologist will check construction areas immediately before construction activities begin anytime during the year.
- 4. The qualified biologist will acquire all appropriate USFWS and NDOW permits or letters of authorization prior to handling desert tortoises and their parts and prior to initiation of any activity that may require handling tortoises.
- 5. The qualified desert tortoise biologist would be present from March 15 through October 15 (active season) during surface-disturbing activities to ensure that desert tortoises are not inadvertently harmed, in areas that Western and USFWS determine that the presence of a biologist is necessary. The biologist shall be on-call from October 16 through March 14 (inactive season).

- 6. Measures that would be taken to minimize mortality or injury of desert tortoises due to construction activities and use of heavy equipment include: (a) all desert tortoises observed by project workers shall be reported immediately to Western's biologist; (b) if blasting is required in desert tortoise habitat, a desert tortoise biologist will be assigned to each blasting crew or to each area in which blasting will occur; and (c) any time a vehicle is parked in desert tortoise habitat, the ground around and underneath the vehicle will be inspected for desert tortoise prior to moving the vehicle. If a desert tortoise is observed, an authorized biologist will be contacted.
- 7. Herbicides shall not be used in the project area unless approved in writing by Western.
- 8. Construction sites, staging areas, and access routes shall be cleared by a qualified tortoise biologist before the start of construction. The project area shall be surveyed for desert tortoise using survey techniques that provide 100 percent coverage. From March 15 through October 15, the preconstruction clearance shall take place no more than three (3) days prior to initiation of construction; from October 16 through March 14, the pre-construction clearance shall take place no more than ten (10) days prior to initiation of construction. All desert tortoise burrows, and other species' burrows that may be used by tortoises, will be examined to determine whether the burrow is occupied by desert tortoises. Tortoise burrows shall be cleared of tortoises and eggs, and collapsed under supervision of a qualified tortoise biologist in accordance with the USFWS protocol (Desert Tortoise Council 1994, revised 1999).
- 9. Tortoises and nests shall be handled and relocated by a qualified tortoise biologist in accordance with USFWS-approved protocol (Desert Tortoise Council 1994, revised 1999). Burrows containing tortoises or nests shall be excavated by hand, with hand tools, to allow removal of the tortoise or eggs. Desert tortoises moved during the tortoise inactive season or those in hibernation, regardless of date, must be placed into an adequate burrow; if one is not available, one shall be constructed in accordance with Desert Tortoise Council (1994, revised 1999) criteria. During mild temperature periods in the spring and early fall, tortoises removed from the site shall not necessarily be placed in a burrow. Tortoises and burrows shall be relocated only to Federally-managed lands.
- 10. Tortoises that are moved offsite and released into undisturbed habitat on public land must be placed in the shade of a shrub, in a natural unoccupied burrow similar to the hibernaculum in which it was found, or in an artificially constructed burrow in accordance with Desert Tortoise Council (1994, revised 1999) criteria.
- 11. Overnight parking and storage of equipment and materials shall be in previously disturbed areas or areas to be disturbed that have been cleared by a tortoise biologist. Other areas needed for overnight

- parking and storage of equipment shall be cleared by the tortoise biologist and approved by the Contracting Officer.
- 12. All vehicular traffic shall be restricted to existing access roads, new constructed access spur roads, or those roads approved by Western in consultation with the USFWS.
- 13. Vehicles shall not exceed the 15 miles per hour speed limit on non-public, access roads.
- 14. All activities shall be confined to designated areas. Blading of vegetation shall occur only to the extent necessary and shall be limited to areas designated for that purpose by the qualified tortoise biologist.
- 15. A litter-control program shall be implemented during construction to minimizepredation on tortoises by ravens drawn to the project site. This program shall include the use of covered, raven-proof trash receptacles, removal of trash from project areas to the trash receptacles following the close of each work day, and proper disposal of trash in a designated solid waste disposal facility. Precautions will be taken to prevent litter from blowing out along the road when trash is removed from the site.
- 16. The USFWS Southern Nevada Field Office ([702] 647-5230) must be notified of any desert tortoise death or injury resulting from project implementation by close of business on the following working day. In addition, the USFWS Division of Law Enforcement shall be notified in accordance with reporting requirements.
- 17. A Western representative(s) shall be designated who will be responsible for overseeing compliance with the reasonable and prudent measures, terms and conditions, reporting requirements and reinitiation requirements contained in the biological opinion. The designated representative shall provide coordination with the USFWS, BOR and NPS.
- 18. Western would implement the terms and conditions of the USFWS Biological Opinion.